

**ATTACHMENT A**  
**Remarks**

Considering the matters raised in the Office Action in the same order as raised, and turning first to the manner in which claims 11-13 have been "interpreted," to the extent that the Examiner is contending that the recited means can be met by the disclosure in the prior art of one of the specific examples to which the Examiner refers, it is agreed that this is appropriate. However, to the extent that the Examiner is attempting to limit the claims to the specific examples set forth in the specification, it is respectfully submitted that such an interpretation is contrary to the patent statutes and clearly inappropriate. Clarification is required. It is noted that with respect to the phrase "means for producing a homogeneous surface tension" in claim 11, the point is now moot in that the claimed means has been limited to a corona treatment means.

Independent claim 1 has been rejected under 35 U.S.C. 103(a) as being unpatentable over "385" in view of "Hill." This rejection is respectfully traversed although claim 1 has been amended to more clearly distinguish over the references cited. In this regard, the subject matter of claim 2 has been incorporated into claim 1 and claim 2 has been canceled. In addition, claims 3-5 have also been canceled. Similarly, the subject matter of claim 12 has been incorporated into claim 11, and claim 12 has been canceled. Finally, a new claim 14 has been added which depends from claim 1.

Turning to the references relied on, the '385 patent discloses, at column 23, beginning at line 45, the application of a thin film material over a circuit region to be prepared or over the entire circuit. The thin film material has a low surface energy. The material is then patterned to selectively remove portions of the low surface energy

material from the areas of the circuit corresponding to the region to be prepared, and, in general terms, to create what are relatively high surface energy regions or areas. Thus, it is agreed that the '385 reference discloses the creation of at least first and second regions or areas with different surface energies. However, the reference clearly does not disclose increasing the surface energy in a first method step and then reducing the energy in a second step, as claimed in claim 1. In addition, the '385 reference does not disclose the use of a corona treatment.

Turning to the Hill reference, it is important to understand that this reference discloses a first method in paragraphs [0023] and [0024] and a second method in paragraphs [0026] to [0031]. In the first method, a corona treatment is used to improve printing of the print pattern. However, the high surface energy of the corona treatment is not reduced in selected regions prior to printing, and the corona treatment disclosed is simply used to promote the adhesion of, and enhancing keying and wetting-out of, printing inks, as described in paragraph [0023].

With respect to the second method, this method simply does not use a corona treatment. Instead, a substrate is treated by the application of a U-V curable, clear transparent coating that is only partially cured during the coating process to enable printing of the substrate. [0026] The partially cured U-V coatings on the substrates enable the print pattern to be applied using U-V curable inks and the like. The print pattern is also only U-V cured. During the partial U-V curing of the print pattern, the exposed portions of the initial transparent coating, which are not covered by the print pattern, are substantially fully cured. Because the print pattern is only partially cured, the print pattern will have a higher surface energy than the areas of the substantially

fully cured coating outside of the print pattern. [0031] The coating outside the print pattern, when substantially fully cured, will have a lower surface energy than the ink on the print pattern. It is respectfully submitted that this method does not create different surface energies in the substrate but rather provides that the completely cured U-V curable coating and the partially cured U-V curable ink have different surface energies and do not afford the same level of adhesion to the subsequently applied ink.

As noted above, the Hill patent does not disclose the use of a corona treatment to create regions of different surface tensions. Moreover, it is respectfully submitted that it is not possible to use such a corona treatment in the method of the '385 reference because the latter relates to a method for repairing electrical circuits. To explain, in the method of the '385 patent, it is necessary to print the electrical functional material partially on first and second circuit elements that are already present on the substrate. However, a corona treatment is only functional with respect to the substrate itself, and not in the regions wherein a circuit element or elements are already present on the substrate. Accordingly, it is simply not obvious to use the corona treatment of the Hill patent in the method of the '385 reference. This is certainly true given the actual teachings of the Hill patent in the paragraphs [0023] and [0024] which are the paragraphs that actually relate to corona treatment.

With respect to the dependent claims, while it is believed that some of the claims are separately patentable, these claims are patentable for at least the reasons set forth above in support of the patentability of parent claim 1.

Allowance of the application in its present form is respectfully solicited.

END OF REMARKS